

REMARKS/ARGUMENTS

Reconsideration and allowance of this application are respectfully requested.

Currently, claims 2-31 are pending in this application.

Objections to the Drawings:

The drawings were objected to as allegedly failing to comply with 37 CFR 1.84(p)(5). In response to these objections, reference signs 31, 34-37 and 41 have been deleted from Fig. 2, reference sign P2-2 has been added to Fig. 2, and the specification has been amended to include a description of reference sign P2-6. Applicant submits that no new matter has been added to this application. Applicant requests that the objections to the drawings be withdrawn.

Rejections Under 35 U.S.C. §103:

Claims 2-5, 7-10, 13-15, 17-21 and 23 were rejected under 35 U.S.C. §103 as allegedly being unpatentable over Hubbard et al (U.S. '961, hereinafter "Hubbard") in view of Redding et al (U.S. '369, hereinafter "Redding"). Applicant respectfully traverses this rejection.

In order to establish a prima facie case of obviousness, all of the claimed limitations must be taught or suggested by the prior art and there must be some suggestion or motivation either in the references themselves or in the knowledge generally available to one of ordinary skill in the art to modify the reference or to combine reference teachings.

Applicant submits that the combination of Hubbard and Redding fails to teach or suggest all of the claimed limitations. In particular, the combination fails to teach or suggest “a plurality of switching circuits, each circuit coupled to a respective transformer and further adapted to switch to multiple positions depending on whether the current flowing through a primary circuit of a respective transformer is in a metering range or an overcurrent range,” as required by independent claim 2 and its dependents. Independent claims 7 and 13 and their respective dependents require a similar feature. Applicant further submits that the combination of Hubbard and Redding fails to teach or suggest “means for causing said switching circuits to switch to multiple positions depending on whether the current flowing in a primary circuit of a respective transformer is in a metering range or an overcurrent range,” as required by independent claim 18 and its dependents.

The Office Action admits “Hubbard does not specifically disclose a plurality of switching circuits coupled to each transformer and further adapted to switch to multiple positions depending on whether the current of the transformer is in a metering range or an overcurrent range.” (See page 3, lines 17-20 of the Office Action). Redding fails to remedy this admitted deficiency of Hubbard. In particular, Redding fails to disclose a plurality of switching circuits coupled to a transformer, let alone switching circuits coupled to a transformer which switch depending on the current flowing through a primary circuit of the transformer.

Redding discloses a cascaded surge suppressor for protecting sensitive electronic or electrical equipment. The cascaded surge suppressor includes a first leg 16 and a second (backup) leg 17. Leg 16 includes, inter alia, an overcurrent device 23 which may be formed by a thin foil conductor which melts or breaks when passing a massive current surge. Overcurrent device 23 thus functions like a fuse. Switch 21 changes from a first state to a second state when overcurrent device 23 fuses. When switch 21 moves to its second state, second leg 17 provides surge protection through overcurrent device 35, thermally sensitive connection 36 and suppressor element 37.

In marked contrast to Redding's cascaded surge suppressor circuit, Hubbard discloses an energy meter. Applicant submits that one of ordinary skill in the art looking to modify the portion of a meter which provides metering, power quality, digital fault recording and/or scada functions would not look to the fuse-like switches of a surge suppressor. The energy meter disclosed by Hubbard is completely different in structure and function than the surge suppressor for protecting equipment disclosed by Redding. Accordingly, Applicant submits that there is no motivation to modify a metering circuit to include the switch circuit of a surge suppressor. The rationale for combining the teachings of Redding and Hubbard is improperly based on hindsight reasoning.

If the teachings of Hubbard were modified in view of the teachings of Redding, the resulting system would merely be an energy meter which is surge protected by a cascaded surge suppressing circuit in which switches connect which leg of the cascaded surge suppressing elements have been activated for protecting the energy meter. The

combination of Hubbard and Redding would not teach or suggest a plurality of switches coupled specifically to a transformer and adapted to switch to multiple positions depending on whether the current flowing through a primary circuit of a respective transformer is in a metering range or an overcurrent range.

Claim 3 depends from independent claim 2 and further comprises a circuit assembly for providing normal mode surge and fast transient protection. Dependent claim 5 which also depends from claim 2 further comprises a circuit assembly for providing common mode surge and transient protection. Dependent claims 9-10, 14-15, 17 and 20-21 also require some type of surge and transient protection. Each of these claims have been rejected under 35 U.S.C. §103 over Hubbard in view of Redding. If the surge suppressor disclosed by Redding were used to modify the metering portion of Hubbard as proposed by the Office Action, what would teach or suggest these further circuit assemblies for providing the surge and transient protection also required by these claims? The circuit disclosed by Redding relates to surge suppressors, not to systems which specifically perform metering. Again, Applicant thus submits that one of ordinary skill in the art would not have been motivated to modify the portion of Hubbard's energy meter which provides metering etc. with switches that are designed for a surge suppressor. If so, what would teach or suggest the additional features required by the above noted dependent claims for providing surge and transient protection?

Accordingly, Applicant submits that claims 2-5, 7-10, 13-15, 17-21 and 23 are not “obvious” over Hubbard in view of Redding and therefore respectfully requests that the rejection of these claims under 35 U.S.C. §103 be withdrawn.

Claims 6, 11, 12, 16 and 22 were rejected under 35 U.S.C. §103 as allegedly being unpatentable over Hubbard in view of Redding and further in view of Larsen et al (U.S. ‘256, hereinafter “Larsen”). Since each of these claims depends from one of independent claims 2, 7, 13 and 18, Applicant submits that the above comments with respect to the combination of Hubbard and Redding apply equally to these claims. Larsen fails to remedy the above described deficiencies. Applicant therefore requests that the rejection of claims 6, 11, 12, 16 and 22 be withdrawn.

New Claims:

New claims 24-31 have been added to provide additional protection for the invention. Claims 24 and 28 depend from claim 2, claims 25 and 29 depend from claim 7, claims 26 and 30 depend from claim 13 and claims 27 and 31 depend from claim 18. Applicant therefore submits that these claims are allowable for at least the reasons discussed above.

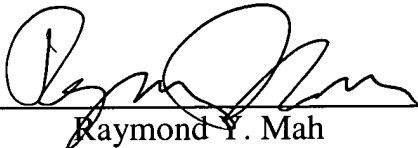
GAMVRELIS et al.
Application No. 09/878,920
January 28, 2004

Conclusion:

Applicant believes that this entire application is in condition for allowance and respectfully requests a notice to this effect. If the Examiner has any questions or believes that an interview would further prosecution of this application, the Examiner is invited to telephone the undersigned.

Respectfully submitted,

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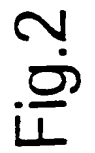


Fig. 2



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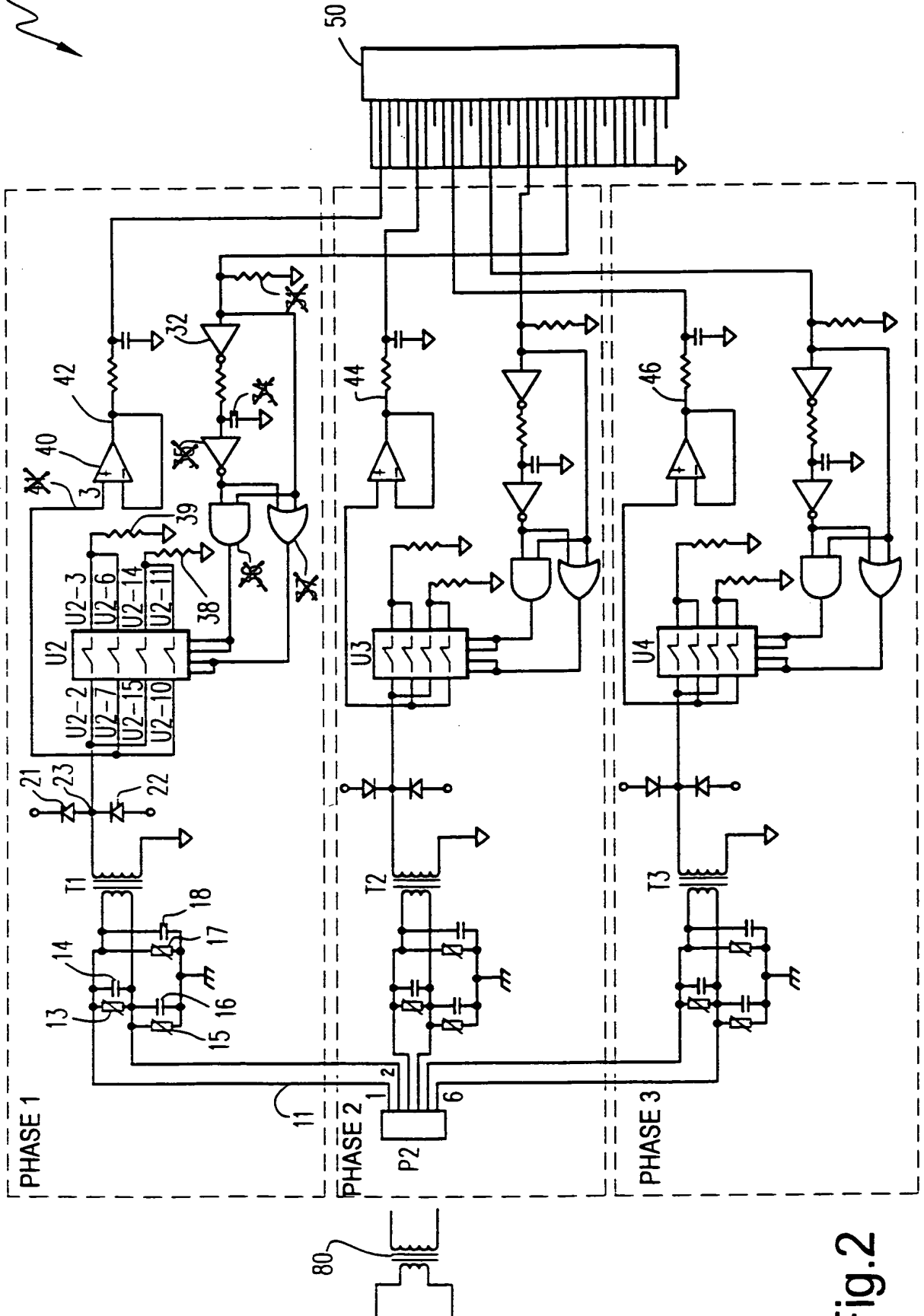


Fig. 2